

PUBLIC NOTICE

PERMIT APPLICATION: NRS 07-071

APPLICANT: Robert Summers, Vice President
TVA – Kingston Fossil Plant
1101 Market Street, LP 3K
Chattanooga, TN 37402
(423) 751-2491

LOCATION: North of Kingston and I-40, east of Swan Pond Road; adjacent to Watts Bar Lake. Roane County.

WATERSHED DESCRIPTION: Clinch River (Watts Bar Lake) (HUC 06010207/06010208). Surrounding land is Watts Bar Lake and existing TVA facilities. Wetland areas are described in the wetland report in this notice.

PROJECT DESCRIPTION: The proposed project involves the construction of a Flue Gas Desulfurization (FGD) system to control sulfur dioxide emissions from the Kingston Fossil Plant (KIF) to meet requirements under the 1990 Clean Air Act Amendments and the Title IV regulations for the Acid Rain Program. Synthetic gypsum will be produced by the reaction of sulfur dioxide with limestone and oxygen in the scrubber absorber. The installation of the FGD system at KIF will necessitate additional disposal facilities for this coal combustion byproduct. TVA plans to market as much of the synthetic gypsum as possible.

This proposed application is for the development of a gypsum disposal facility on a peninsula on the KIF reservation. The planned development of the facility will be in two phases. Phase I will require impacts to two wetland areas (identified as W3 and W4 in the wetland report). Phase II will affect wetland areas W1, W1A, and W2. The total wetland impacts will be 4.81 acres of which 1.35 acres is open water habitat and other amounts are fringe wetlands.

Compensatory wetland mitigation will occur offsite in the Drowning Creek floodplain. Drowning Creek is a tributary to the Obed River and is in HUC 06010208. The site is 27 acres of which 19.5 are suitable for wetland mitigation on Atkins soils which are on the hydric soil list for Cumberland County. The site is currently under pasture with pockets of herbaceous wetland vegetation. The site has been altered by ditches that were excavated to facilitate livestock usage but much of the site still retains some sufficient hydrology to be classified as jurisdictional wetlands. However, grazing and ditching have resulted in significant but reversible degradation.

The proposed wetland mitigation plan will involve the filling of ditches to prevent the drainage of surface water and restore groundwater hydrology to zones immediately near the ditches (Figures #6 and #7). Some ditches will be blocked instead of being filled to create diversity and small pools for amphibians.

Tree species such as willow oak, cherrybark oak, white oak, persimmon, water tolerant dogwoods, ironwood and possumhaw will be planted on ten foot centers at the rate of 450/acre. No one species will comprise more than 20% of the total. Species will be planted in locations according to their tolerance to inundation and saturation.

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The site will be monitored with annual reports submitted to this office and the US Army Corps of Engineers.

In accordance with the Tennessee Antidegradation Statement (Rule 1200-4-3-.06), the division has determined that the proposed activity will not result in degradation to water quality.

**USGS TOPOGRAPHIC QUADRANGLE: Harriman 123 NE
 Elverton 130 NW
 35.8951 lat
 84.5018 long**

PERMIT COORDINATOR: Mike Lee

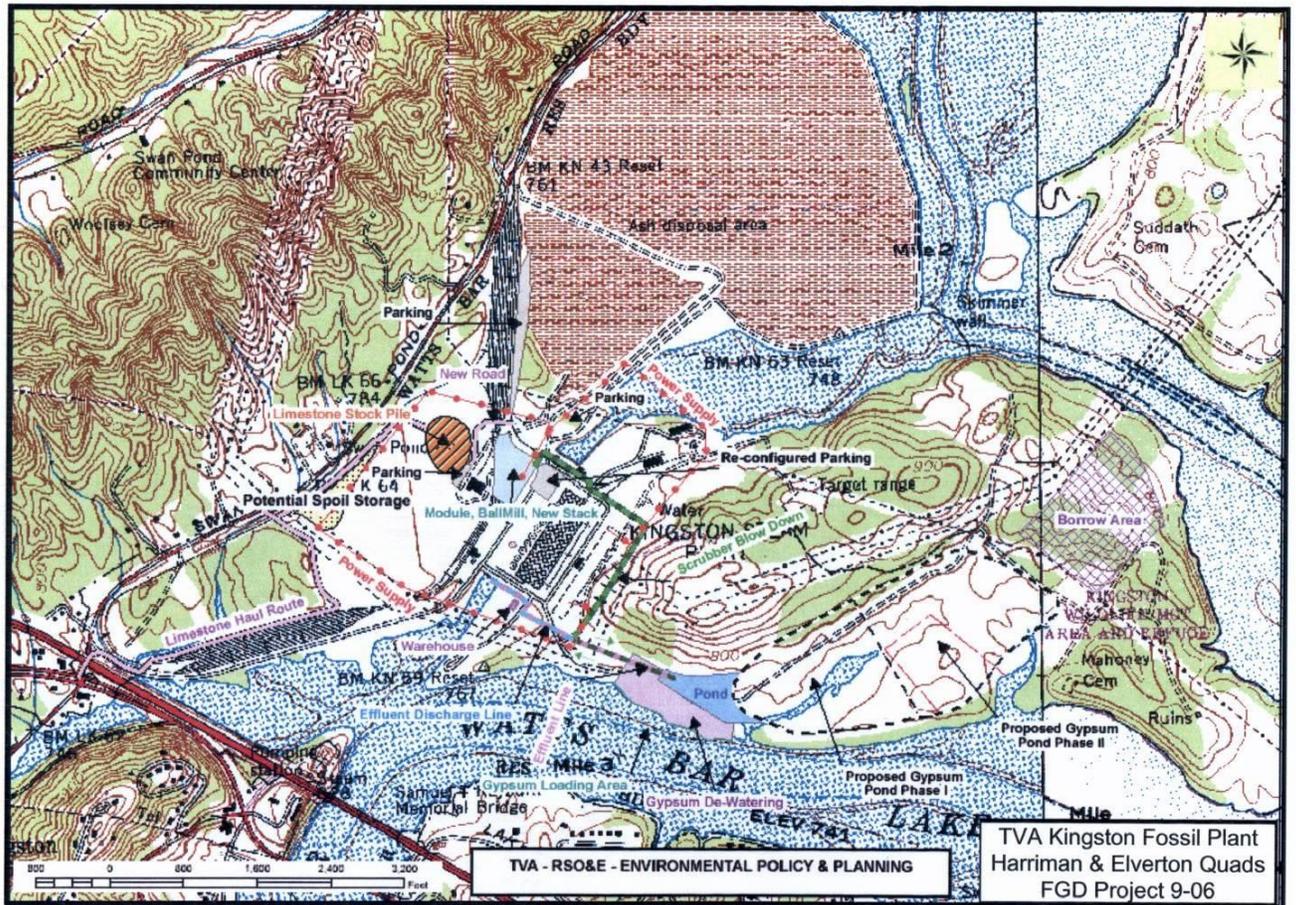
No decision has been made whether to issue or deny this permit. The purpose of this notice is to inform interested parties of this permit application and to ask for comments and information necessary to determine possible impacts to water quality. Persons wishing to comment on the proposal are invited to submit written comments to the department. Written comments must be received within **thirty days of the date that this notice is posted**. Comments will become part of the record and will be considered in the final decision. The applicant's name and permit number should be referenced.

A Public Hearing has been scheduled for the proposed project. The hearing will be held on Tuesday, May 29, 2007 at 6:30 P.M. EDT in the Roane County Rescue Squad Building, 2735 Highway 70, Midtown, Tn. 37748. The Notice for the Hearing is included in this Public Notice.

The permit application, supporting documentation including detailed plans and maps, and related comments are available at the department's address for review and/or copying. The department's address is:

Tennessee Department of Environment & Conservation
Division of Water Pollution Control, Natural Resources Section
7th Floor L & C Annex
401 Church Street
Nashville, TN 37243

In deciding whether to issue or deny a permit, the department will consider all comments on record and the requirements of applicable federal and state laws.





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On October 13 and 17, 2005, a ground survey was conducted within the proposed project areas on the TVA KIF property to identify jurisdictional wetlands. Four wetlands were found (W1/W1A, W2, W3, and W4) and classified according to the Cowardin system (Cowardin et al., 1979). These wetlands are depicted on enclosures. Wetland determinations were performed according to USACE standards, which require documentation of hydrophytic vegetation, hydric soil, and wetland hydrology (Environmental Laboratory, 1987; Reed, 1997). Broader definitions of wetlands, such as that used by the U.S. Fish and Wildlife Service (Cowardin et al., 1979), the Tennessee definition (Tennessee Code 11-14-401), and the TVA Environmental Review Procedures definition (TVA, 1983), were also considered in this review. In addition, the TVA Rapid Assessment Method (TVARAM) was used to assess wetland condition and identify wetlands with special ecological significance (Mack, 2001).

The following text and Table 1 describe the findings of the initial assessment. Acreage of impacts has been reduced due to the modification of footprint for the FGD disposal facility and is shown below in italics.

Wetland W1/W1A is a fringe wetland encompassing two drainage ways on site and extending along an embayment of Watts Bar Reservoir. This wetland is classified as palustrine forested and is approximately 1.3 acres in size. Dominant vegetation include silver maple (*Acer saccharinum*), Chinese privet (*Ligustrum sinense*), sweet gum (*Liquidambar styraciflua*), and smooth alder (*Alnus serrulata*).

Wetland W2 is formed in a small depression at the head of an on-site drainage way. It is classified as palustrine forested and is approximately 0.05 acre in size. It is hydrologically connected to W1/W1A. Dominant vegetation includes silver maple, Chinese privet, red alder, and black willow (*Salix nigra*).

Note: reduction in impact to W1/W1A/W2 is ~1.04 acres.

Both W1/W1A and W2 are located within the proposed Gypsum Pond Phase 2 portion of the project area. Both wetland complexes meet USACE wetland determination standards and function in storm water retention, erosion control, and provision of wildlife habitat.

Wetland W3 consists of the fringe habitat along the channel/pond extending from the southwest through the center of the proposed Gypsum Pond Phase 1 project area. This complex is classified as palustrine forested and includes an open water pond and drainage channel connected to Watts Bar Reservoir. The majority of the drainage channel has been diked; however, wetland fringe habitat is present along the dike and extends through breaks in the dike. This wetland complex is approximately 3.9 acres in size and is dominated by sycamore (*Platanus occidentalis*), tulip poplar (*Liriodendron tulipifera*), smooth alder, Chinese privet, and silver maple.

Wetland W4 is a palustrine-forested complex connected hydrologically to W3 and located in the southwest corner of the Gypsum Pond Phase 1 project area. This area comprises 0.6 acre and receives hydrology from intermittent but temporary flooding associated with Watts Bar Reservoir water levels. Dominant vegetation includes Sweet

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gum, red maple (*Acer rubrum*), Chinese privet, and Nepalese browntop (*Microstegium vimineum*).

Both W3 and W4 meet the U.S. Fish and Wildlife Service wetland definition and may be considered jurisdictional by the USACE under the Clean Water Act. Although the hydric soil parameter is absent in these wetland complexes, both wetlands appear to be the consequence of disturbance to the area's hydrologic regime. Ditching, diking, and channeling have altered drainage patterns such that hydrophytic vegetation dominates the temporarily or permanently saturated/inundated soils of these wetlands, although hydric soil indicators have not yet developed. Both wetland complexes function in storm water retention, erosion control, and provision of wildlife habitat.

Table 1 Affected Wetlands				
Wetland ID	Type ^a	Estimated Acreage	TVA RAM Score	TVA RAM Category
W1/W1A	PFO1B	~1.3	67.5	3
W2	PFO1C	~0.05	47.5	2
	subtotal	~1.35 acres 10/05 ~0.31 acres 9/06		
W3	PFO1E/PUB	~3.9	61	3
W4	PFO1A	~0.6	42	2
TOTAL		~5.85 acres 4.81 acres 9/06		

^a Based on Cowardin et al. (1979)









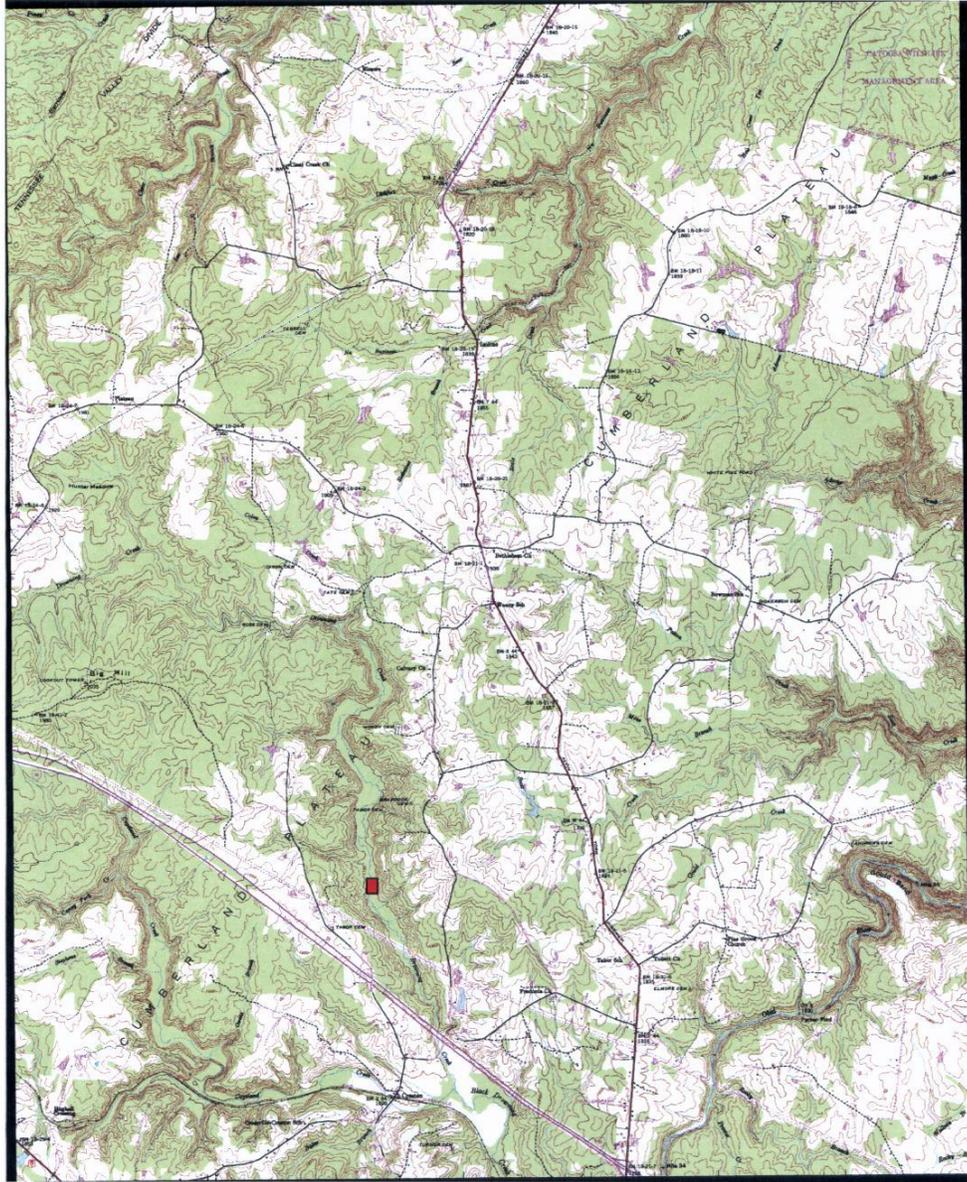


Figure 1. Approximate location of site northeast of Crossville, TN on the Isoline Quadrangle marked in red.

PROPOSED WETLAND MITIGATION SITE



Figure 3. View of site showing grazed pasture dominated by fescue and various species of sedges and rushes.



Figure 4. View of site showing excavated watering areas being used by livestock.

